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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/090,060	03/01/2002	Caidian Luo	HARD1.033A	4640
20995	7590	04/09/2004	EXAMINER	
KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614			MARCANTONI, PAUL D	
			ART UNIT	PAPER NUMBER
			1755	

DATE MAILED: 04/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/090,060	LUO ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Paul Marcantoni	1755	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

Applicant's election without traverse of Group I, claims 1-8 in their 2/9/04 response is acknowledged.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 are rejected under 35 U.S.C. 102(a and b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Naji (US Patent No. 6,030,447), Ries '196, or Chumbley et al. '480.

Naji et al. '447 teach a cement composition comprising cellulose fibers and dispersant thus anticipating the instant invention. (See claims 13 and 16). It is the examiner's position that even if not anticipated, a dispersant's function is to disperse and reduce interparticle/fiber attraction and this would still have been accomplished thus rendering applicants' invention obvious to one of ordinary skill in the art. Further, it would have been an obvious design choice for one of ordinary skill in the art to use a cationic, non-ionic or ionic dispersant as all are functionally equivalent.

Ries '196 teaches mixing cellulose fibers and surfactants including cationic, non-ionic, and anionic (see col.2, last 3 paragraphs and col.3 line 35) thus anticipating the instant invention. It is the examiner's position that even if not anticipated, a dispersant's function is to disperse and reduce interparticle/fiber attraction and this would still have been accomplished thus rendering applicants' invention obvious to one of ordinary skill in the art. Further, it would have been an obvious design choice for one of ordinary skill in the art to use a cationic, non-ionic or ionic dispersant as all are functionally equivalent.

Chumbley et al. teach treating cellulose fibers with a sizing agent including cationic or non-ionic dispersants thus anticipating the instant invention (see col.7, lines 20-30). It is the examiner's position that even if not anticipated, a dispersant's function is to disperse and reduce interparticle/fiber attraction and this would still have been accomplished thus rendering applicants' invention obvious to one of ordinary skill in the art. Further, it would have been an obvious design choice for one of ordinary skill in the art to use a cationic, non-ionic or ionic dispersant as all are functionally equivalent.

Lundin teach treating cellulose fibers with a cationic dispersant thus anticipating the applicants' claimed invention. (see col.2, lines 55-65). It is the examiner's position that even if not anticipated, a dispersant's function is to disperse and reduce interparticle/fiber attraction and this would still have been accomplished thus rendering applicants' invention obvious to one of ordinary skill in the art. Further, it would have

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been an obvious design choice for one of ordinary skill in the art to use a cationic, non-ionic or ionic dispersant as all are functionally equivalent.

Finally, the dispersant is a debonder so it would break bonds so as to "disperse the mixture.

Claims 1-8 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-52, 1-72, and 1-78 of U.S. Patent Nos. 6,676,745 B2 (Merkley et al.), 6,506,248 B1 (Duselis et al.), or 6,346,146 (Duselis et al.). Although the conflicting claims are not identical, they are not patentably distinct from each other because all references teach a composition comprising cellulose fiber and dispersant which would inhibit bonding between hydroxyl groups of fibers and thus would have been obvious to one of ordinary skill in the art. Merkley et al. '745 B2 seems to be the strongest reference. However, the other references also teach the presence of cellulose fibers and dispersant which would mix and result in the properties as set forth in claims 1-8.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Marcantoni whose telephone number is 571-272-1373. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell, can be reached at 571-272-1362. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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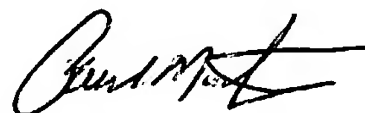
published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).



Paul Marcantoni  
Primary Examiner  
Art Unit 1755